What is claimed is:

- 1. A method for simulating the driving behavior of vehicles on a test stand in which the engine of the vehicle is coupled on the test stand to an electronically controllable braking apparatus and a simulation model calculates simulation values of variables which are representative of the driving state of the vehicle in that the reaction of the vehicle to the behavior of the engine and the values of the variables as determined immediately prior thereto are calculated, with at least the vehicle speed and the slip occurring in the driving wheels being calculated as variables, wherein for controlling the braking apparatus a virtual vehicle speed is used which is changed by a corrective value which depends on the slip.
- 2. A method according to claim 1, wherein the corrective value depends primarily on short-term fluctuations of the slip.
- 3. A method according to claim 1, wherein a speed of non-driven wheels of the vehicle as calculated by the simulation model is changed by a further corrective value which depends on the slip.
- 4. A method according to claim 1, wherein a slip by acceleration is reflected by a positive corrective value and a slip by retardation or blocking of the driven wheels is reflected by a negative corrective value.
- 5. A method according to claim 1, wherein the lateral slip is considered or corrected by a further simulation model.
- 6. A method according to claim 1, wherein inclinations of the vehicle chassis are taken into account.
- 7. A method according to claim 1, wherein the speed calculated by the simulation model or the slip calculated by simulation model is used for electronic vehicle control or for electronic engine control.